HOLGUIN, FAHAN & ASSOCIATES, INC.
ENVIRONMENTAL MANAGEMENT CONSULTANTS

January 28, 2005

Ms. Erin K. O'Connell
County of Ventura Resource Management Agency
Environmental Health Division
800 South Victoria Avenue
Ventura, California 93009-1730

Subject: **WELL DESTRUCTION REPORT FOR**
CHEVRON PRODUCTS COMPANY SERVICE STATION #9-8749
522 NORTH LAS POSAS ROAD, CAMARILLO, CALIFORNIA
(FILE #C87020)

Dear Ms. O'Connell:

On behalf of Chevron Environmental Management Company (CEMC), Holguin, Fahan & Associates, Inc. (HFA) is pleased to present this well destruction report to document the destruction procedures for 12 monitoring wells at the above-referenced Chevron Products Company service station (see Figure 1 - Site Location Map and Figure 2 - Plot Plan). The wells were destroyed following VCEHD's concurrence of completion of site investigation and corrective action and in accordance with VCPWA permit requirements (see Attachment 1 for the agency correspondence, and Attachment 2 for the county well permit). A list of acronyms used in this report is included.

The site contact is Mr. Eric Roehl, Chevron Environmental Management Company, Post Office Box 2292, Brea, California, 92822-2292, (714) 671-3347. The consultant contact is Ms. Elva Rogers, Holguin, Fahan & Associates, Inc., 143 South Figueroa Street, Ventura, California, 93001, (805) 585-6372. The regulatory contact is Ms. Erin K. O'Connell, Ventura County Environmental Health Division, 800 South Victoria Avenue, Ventura, California, 93009-1730, (805) 662-6511.

WELL DESTRUCTION PROCEDURES

On September 20 and 21, 2004, and October 5, 2004, 12 monitoring wells (MW-1, MW-3, MW-4, MW-5, Well-2, Well-5, Well-6, Well-7, VEW-5, VEW-6, VEW-7, and VEW-8) were destroyed in accordance with the requirements in the CDWR Bulletin #74-81 dated December 1981 (see Figure 2 for the well locations). The work was performed under well permit #5844 issued by the County of Ventura (see Attachment 2). The groundwater monitoring wells were originally

143 South Figueroa Street
Ventura, California 93001
(805) 652-0219
(805) 652-0793 FAX
Mark_Fahan@hfa.com

948 North Lemon Street
Orange, California 92867
(714) 210-5971
(714) 210-5975 FAX
Steve_Edelman@hfa.com

948 North Lemon Street
Orange, California 92867
(714) 210-5971
(714) 210-5975 FAX
Amanda_Hancock@hfa.com

1003 East Cooley Drive, Suite 201
Colton, California 92324
(909) 422-8988
(909) 422-8099 FAX
Steve_Edelman@hfa.com

1215 South Park Lane, Suite 1
Tempe, Arizona 85281
(866) 505-3332 • (480) 505-3332
(480) 505-3336 FAX
Martin_Minter@hfa.com

www.hfa.com

constructed of either 2-inch or 4-inch-diameter PVC casing extending between 20 and 50 fbg, and the vapor extraction wells were constructed of 2-inch-diameter PVC casing extending to approximately 35 fbg.

Prior to destruction, the wells were carefully inspected in order to detect any obstructions that could interfere with the process of sealing the wells. No such obstructions were found. The well casing, filter pack, and sanitary seal of the wells were removed by overdrilling with 10-inch-diameter auger to the total depth using a CME-75, hollow-stem auger drill rig. The boreholes were then sealed with a portland cement bentonite grout mixture to 5 fbg, with hydrated bentonite chips from 5 to 1 fbg and with concrete to grade (see Attachment 3 for the water well sealing records).

Well-6 and Well-7 were identified as angled wells underneath the station canopy. With approval from the VCPWA, these wells were pressure grouted and the top 5 feet of casing was excavated. The well casings were pressurized. Upon releasing the pressure, the casings were cut off at 5 fbg and the well casings were topped-off with hydrated bentonite chips and sealed with concrete.

The horizontal pipes running from the remediation wells to the former remediation compound were abandoned in place using portland cement bentonite grout mixture. The pipe stub-ups in the remediation compound were cut off at grade and sealed with concrete.

Two traffic-rated well boxes containing shallow vapor points VP-1 through VP-2 consisting of three, 0.25-inch-diameter teflon tubes were destroyed by drilling out to 8 fbg, backfilling with portland cement bentonite grout mixture, removing the well boxes, and sealing with concrete (see Figure 2 for the vapor point locations).

Soil cuttings and decontamination water generated during this activity were placed in DOT-approved, 55-gallon drums on-site, pending sample analysis for waste profiling. The soil cuttings and decontamination water were subsequently removed from the site and transported to TPS Technologies in Adelanto, California, and US Filters Recovery Services in Los Angeles, California, respectively, for recycling (see Attachment 4 for the waste manifests).

Submittal of this report fulfills the requirements as specified by the VCEHD in its closure recommendation letter dated February 10, 2004.

Holguin, Fahan & Associates, Inc., trusts that the Ventura County Environmental Health Division will find this well destruction report meets its requirements. If you have any questions or require additional information, please contact me at (805) 585-6372 or Elva_Rogers@hfa.com.

Respectfully submitted,

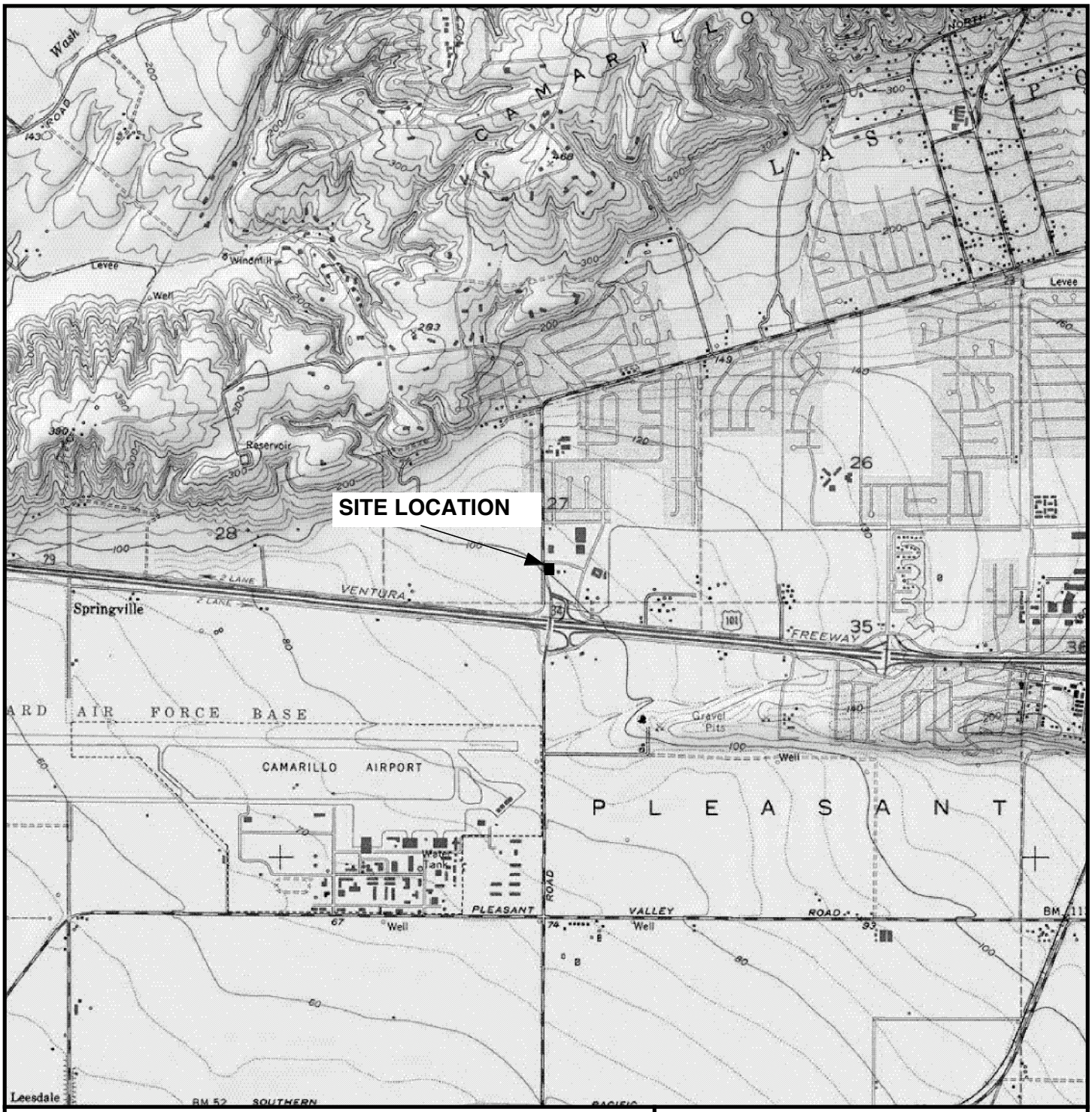
Elva M. Rogers, RG
Senior Geologist
Holguin, Fahan & Associates, Inc.

REGISTERED GEOLOGIST
ELVA M. ROGERS
No. 6530
Exp. 9/06
STATE OF CALIFORNIA

TJ:emr:mgh

Enclosures: Figure 1 - Site Location Map
Figure 2 - Plot Plan
List of Acronyms
Attachment 1 - Agency Correspondence
Attachment 2 - County Well Permit
Attachment 3 - Water Well Sealing Records
Attachment 4 - Waste Manifests

cc: Mr. Eric Roehl, CEMC
Ms. Barbara Council, VCPWA



LEGEND

0 0.5 1 MILE

0 1,000 2,000 3,000 4,000 5,000 FEET

0 0.5 1 KILOMETER

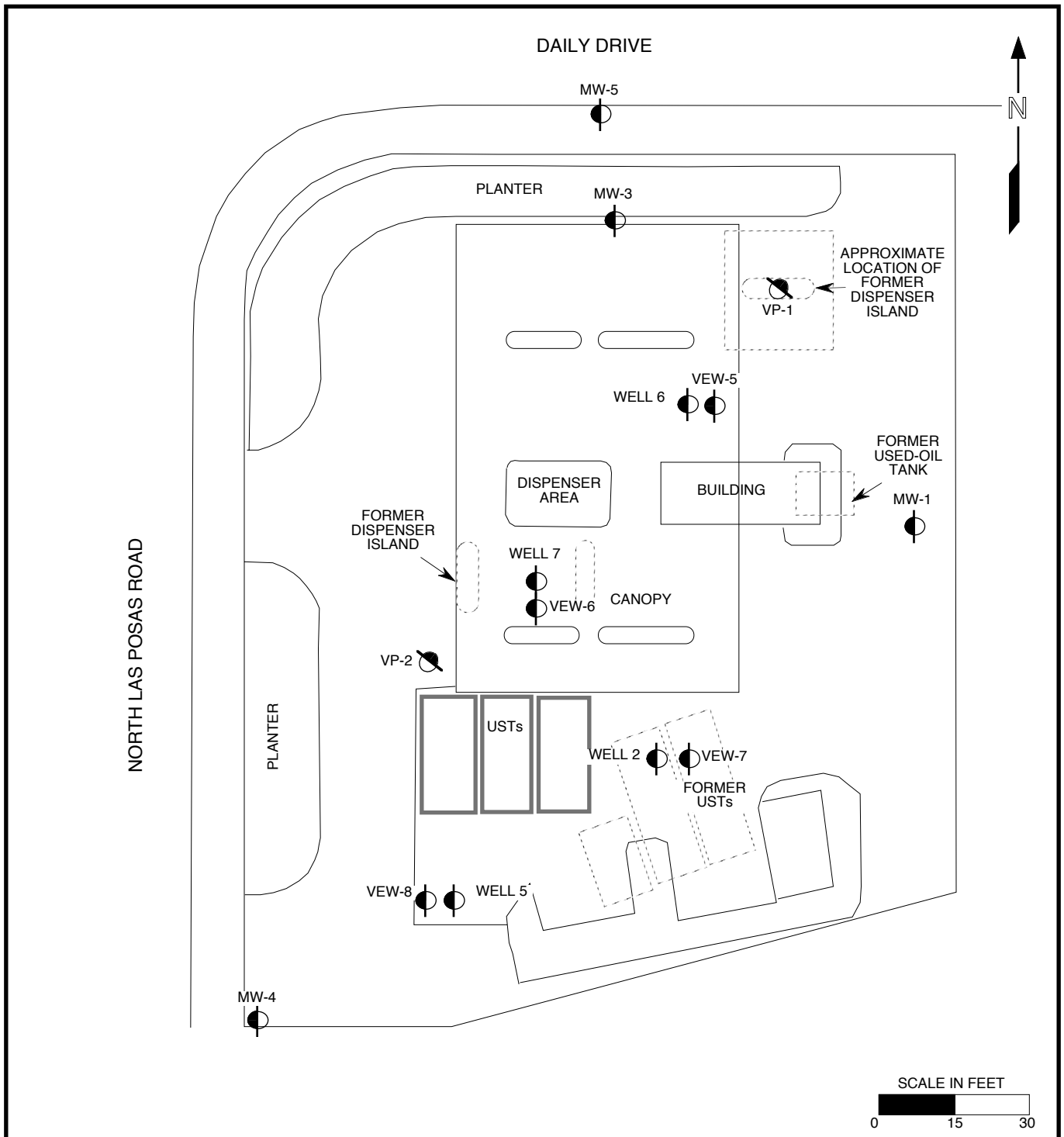
BASE MAP FROM TOPO! ©2000 NATIONAL GEOGRAPHIC HOLDINGS

N

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

SERVICE STATION #9-8749
522 NORTH LAS POSAS ROAD
CAMARILLO, CALIFORNIA
FIGURE 1 - SITE LOCATION MAP

HOLGUIN, FAHAN & ASSOCIATES, INC.



LEGEND	CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
DESTROYED MONITORING WELL OR VAPOR EXTRACTION WELL DESTROYED VAPOR POINT	SERVICE STATION #9-8749 522 NORTH LAS POSAS ROAD CAMARILLO, CALIFORNIA FIGURE 2 - PLOT PLAN **HOLGUIN, FAHAN & ASSOCIATES, INC.**

REVISION DATE: JANUARY 23, 2004: TQ

LIST OF ACRONYMS

CDWR	California Department of Water Resources
CME	Central Mine Equipment Company
DOT	Department of Transportation
fbg	feet below grade
PVC	polyvinyl chloride
UST	underground storage tank
VCEHD	Ventura County Environmental Health Division
VCPWA	Ventura County Public Works Agency

ATTACHMENT 1.

AGENCY CORRESPONDENCE

RESOURCE MANAGEMENT AGENCY
county of ventura

Environmental Health Division
Robert Gallagher
Director

February 10, 2004

File #C87020

Mr. Dan Pirotten
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

CASE CLOSURE RECOMMENDATION, CHEVRON SERVICE STATION #9-8749, 522 LAS POSAS ROAD, CAMARILLO, CALIFORNIA

After review of all available data pertinent to this case, the Ventura County Environmental Health Division (EHD) concludes that the residual contamination in soil and groundwater at this site do not pose a significant threat to human health, beneficial or potentially beneficial groundwater, or the environment. Therefore, the EHD recommends this case be closed.

Site maps, tables of analytical results for soil and groundwater, case closure summary form, and Risk-Based Corrective Action (RBCA) summary are attached.

SITE DESCRIPTION

The site is an active Chevron-owned and operated retail service station located on the southeastern corner of the intersection of North Las Posas Road and Daily Drive in Camarillo, California (Figure 1). The site is in a mixed commercial and residential area. Three gasoline underground storage tanks (USTs), four dispenser islands, and a kiosk are currently located at the site.

Commercial properties surround the site, with residential areas to the northwest. No public schools or hospitals are located within 1,000 feet of the site. A drinking water well for the City of Camarillo is located approximately 1,000 feet southwest of the site.

REGIONAL GEOLOGY AND HYDROGEOLOGY

The site is located in the eastern part of the Oxnard Coastal Plain at an elevation of approximately 105 feet above mean sea level. The local topography gently slopes to the southwest. The site is underlain by approximately 1,100 feet of alluvial sediments, which overlie the San Pedro Formation. The Springville and Camarillo faults are to the north and south of the site, respectively. Both faults act as barriers to the movement of groundwater. Previous investigations indicate that the site is underlain by interbedded sand and clayey silt to at least 40 feet below ground surface.

800 South Victoria Avenue, Ventura, CA 93009-1730 (805) 654-2813 FAX (805) 654-2480
Internet Web Site Address: www.ventura.org/envhealth

The site is located within the Pleasant Valley Groundwater Basin. In the site vicinity, groundwater for municipal use is produced primarily from the Fox Canyon and Grimes Canyon aquifers in the Lower Aquifer System of the San Pedro Formation. The top of the Lower Aquifer System in the area of the site is estimated at 750 fbg.

Groundwater within designated aquifers has potential beneficial uses for municipal, agricultural, industrial service, and industrial process supply. Semi-perched groundwater within this basin has potential beneficial uses for industrial and agricultural supply. However, the shallow perched groundwater at the site is generally of poor quality and is not known to be used for beneficial purposes (HFA, December 26, 2003).

The most recent depth to groundwater at the site is approximately 20 feet bgs, which is also the historical high. The groundwater flow direction beneath the site has varied but is generally to the northwest.

SOIL AND GROUNDWATER ASSESSMENT AND REMEDIATION

Soil samples were initially collected in February 1987, after removal of the initial tanks. An estimated 585 cubic yards of contaminated soil were removed. In April 1987, three groundwater monitoring wells (MW-1, MW-3, and MW-4) and four vadose wells (W-2, W-5 through W-7) were installed.

From July 1989 to August 1991, a vapor extraction system equipped with a catalytic oxidation unit was operated and removed approximately 950 pounds of hydrocarbons.

In December 1991, ten cone penetrometer test borings (B-1 through B-10) were advanced and sampled. In April 1993, five soil borings (B-11 through B-15), one groundwater monitoring well (MW-5), four vadose wells (VEW-5 through VEW-8), and two vapor probes (VP-1 and VP-2) were installed.

From August 1995 through September 1996, the VES was operated with a biofilter and approximately 130 pounds of BTEX were removed.

In September 1995, 16 soil samples were collected during tank upgrade activities. Three horizontal vapor extraction wells were also installed at that time, and approximately 111 cubic yards of contaminated soil were removed.

In August 1999, five confirmation soil borings (B-16 through B-20) were drilled and sampled. Of the 27 samples analyzed, only one contained any significant contamination.

GROUNDWATER MONITORING

Groundwater monitoring has been performed since 1991. During the Fourth Quarter 2003, TPH as gasoline, BTEX, MTBE, TBA, TAME, DIPE, and ETBE were not detected. PCE and TCE have been detected in three of the onsite wells but these concentrations have been stable to decreasing.

SENSITIVE RECEPTOR SURVEY AND CONDUIT STUDY

The closest well to the site is active irrigation well 2N/21W-34C01, located about 1,000 feet southwest of the site. This well is reported as being screened in the Lower Aquifer System (at least 750 feet bgs). The well is owned by the City of Camarillo. Three irrigation wells were identified at locations from 2,000 to 3,500 feet to the west and south of the site.

A conduit study indicated that only standard utilities are located in the site vicinity.

HEALTH-BASED RISK ASSESSMENT

A risk-based corrective action evaluation was conducted for the site, both by Chevron's consultant and by the EHD. Both evaluations concluded that the calculated risk from the residual contamination remaining at the site is less than 1.0 x 10-6, which is considered acceptable. Including the residual PCE and TCE in soil and groundwater, the residual contamination beneath the site passes the RBCA evaluation for residential sites (Attachment B). In addition, the EHD's evaluation concluded that:

- The surface water exposure pathway is not a completed exposure pathway because surface water is not impacted and the perched groundwater beneath the site is not produced for public consumption in the site vicinity.

- The groundwater exposure pathway is calculated at being 5.7 x 10 –8 which is substantially below the guidelines for acceptable risk.

- Although soil exposure is not a pathway of concern as the site is fully developed as commercial property and areas containing residual hydrocarbon concentrations are paved or covered with concrete, the risk assessment was conducted as though this pathway were complete. The risk associated with soil exposure was calculated to be 2.0 x 10 –8 which, if the pathway were complete, is substantially beneath the guideline for acceptable risk.

- Volatilization to indoor air is not a pathway of concern as no building is located over or is likely to be located over the residual hydrocarbons. However, the risk associated with indoor air volatilization was calculated to be 1.7 x 10 –7 which, if the pathway were complete, is substantially beneath the guideline for acceptable risk.

- The most probable pathway of concern is due to outdoor air volatilization. The maximum residual contamination concentrations were used to evaluate the current and potential risk associated with outdoor air volatilization. The risk was determined to be 6.7 x 10 –10, which is substantially below the guidelines for acceptable risk.

Therefore, the known contamination beneath the site should not pose a threat to human health or the environment according to these guidelines.

RECOMMENDATION

Based on the above discussion, the EHD recommends "low-risk" site closure. A Case Closure Summary form has been prepared in accordance with closure requirements (Attachment A).

Once confirmation has been received from the LARWQCB, all existing monitoring wells will be required to be located and removed in accordance with LARWQCB guidelines and Ventura County Public Works Agency (VCPWA) permit requirements. Records of well sealing must be forwarded to the EHD and the VCPWA.

If you have any questions, please call me at (805) 662-6511.

ERIN K. O'CONNELL, R.G., C.E.G.
LUFT PROGRAM
ENVIRONMENTAL HEALTH DIVISION

Attachments
Figures 1 - 6
Tables 1 - 7
Attachment A - Case Closure Summary Form
Attachment B – RBCA Evaluation

c: Ms. Elva Rogers, Holguin, Fahan & Associates, Inc. (w/o attachments)
Mr. Duane Regli, Chevron Products Company (w/o attachments)

RESOURCE MANAGEMENT AGENCY
county of ventura

Environmental Health Division
Robert Gallagher
Director

REMEDIAL ACTION COMPLETION CERTIFICATION

March 29, 2004

File #87020

Mr. Duane Regli
Chevron Products Company
Marketing Operations Services
145 South State College Boulevard, #400
Brea, CA 92822

SITE NAME/ADDRESS: **CHEVRON SERVICE STATION #9-8749, 522 LAS POSAS ROAD, CAMARILLO, CALIFORNIA**

This letter confirms the completion of a site investigation and corrective action for the underground storage tanks located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of the Health and Safety Code (HSC), subdivisions (a) and (b) of Section 25299.37 and with corrective action regulations adopted pursuant to HSC, Section 25299.77 and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to HSC, subdivision (h) of Section 25299.37. If you have any questions regarding this matter, please contact Erin K. O'Connell of the LUFT Program staff at 805/662-6511.

Robert Gallagher
ROBERT GALLAGHER, DIRECTOR
ENVIRONMENTAL HEALTH DIVISION
RESOURCE MANAGEMENT AGENCY

Enclosure: Case Closure Summary Form

c: Ms. Elva Rogers, Holguin, Fahan & Associates, Inc. (w/enclosure)
Mr. Tom P. Smith, City of Camarillo (w/enclosure)
Bob Trommer, SWRCB (w/enclosure)
Yue Rong, LARWQCB (w/enclosure)

ATTACHMENT 2.

COUNTY WELL PERMIT

County of Ventura
WELL PERMIT

800 South Victoria Avenue; Ventura, CA 93009

	Property Owner	Driller	Registered Inspector
Name	Chevron Environmental Mgmt.	Cascade Drilling Inc.	Holguin, Fahan & Associates
Address	145 S/ State College Blvd., #400 Brea, CA 92822	11250 Firestone Blvd Norwalk, CA 90650	143 S. Figueroa St. Ventura, CA 93001
Telephone	(714) 671-3200	(562) 929-8176	(805) 585-6372 FAX 652-0793

Type of Work	**Monitoring Well – Destruction (12)**	**Sealing Zone**	2	**Main Use**	Monitoring
SWN (Partial)	02N21W27Q	**ID**	NA	**APN**	164-0-131-225
Fee	$640.00	**Receipt No.**	5875	**Prep by:**	Barbara Council

Conditions

1. Permit issue and expiration dates are as follows:

   Issue Date: 08/17/04
   Expiration Date: 02/17/05

2. Property Owner, Driller ("Contractor") and Registered Inspector shall comply with all provisions of Ventura County Well Ordinance No. 4184, and all applicable State of California and local regulations pertaining to well construction, repair, modification and destruction.

3. Work shall be performed by a licensed water well contractor (C-57), who must also be registered with the Water Resources & Development Department ("Department").

4. All work shall be inspected by a licensed Civil Engineer, Registered Geologist or Certified Engineering Geologist, who must also be registered with the Water Resources and Development Department ("Department").

5. Contractor shall retain all drilling fluids and groundwater discharges within the drilling site, unless an NPDES permit has been obtained from the California Regional Water Quality Control Board, Los Angeles Region. The NPDES permit shall be obtained prior to drilling operations.

6. Borehole Destruction:

   a. Measure the total depth of the monitoring well(s) and redrill to the total depth. Existing casing, seal and gravel envelope shall be removed.

   b. Immediately after redrilling, bentonite clay chips, neat cement or cement grout shall be placed from the bottom of the borehole to a depth of 5 ft below ground surface.

Bentonite chips shall be hydrated as placed and shall be placed by means of a grout pipe positioned within 2 feet of the base of the borehole. If the sealing zone depth is 25 feet or less, bentonite chips may be placed by free-fall method.

All cement sealing material shall be placed by means of a grout pipe positioned within 2 feet of the base of the sealing zone. If there is no standing water in the borehole and the depth is 25 feet or less, a grout pipe will not be necessary.

   c. Clean native soil or other suitable material shall be placed from a depth of 5 ft to ground surface.

7. Post Requirement:

Registered Inspector's Well Sealing Report: Within 30 days after work is completed, Registered Inspector shall submit a Registered Inspector's Well Sealing Report for the monitoring well(s). Mail to County of Ventura – Public Works Agency, Water Resources and Development Department; Attn: Barbara Council (Re: MW Sealing Report); 800 South Victoria Avenue; Ventura, Ca. 93009-1600. **Failure to submit documents within 30 days will preclude Property**

RECEIPT NO. 5875

PUBLIC WORKS AGENCY
WATER RESOURCES AND DEVELOPMENT DEPARTMENT
WATER RESOURCES DIVISION

RECEIVED FROM: Holguin, Fahan & Associates, Inc **DATE** 17-Aug-04
ADDRESS: 143 S. Figueroa St.
CITY Ventura, CA 93001

FLOOD CONTROL REVENUE 1700-PFA-6300-8771-P029

$640.00	P6029551	WATER WELL PERMIT NUMBER 5844
		LOCATION: 522 Las Posas, Camarillo
		OWNER: Chevron
$0.00	P6029552	RE-USE PERMITS
$0.00	P6029575	HYDROGEOLOGY REPORT
$0.00	P6029574	TECHNICAL INFO. REPORT
$0.00	P6029574	GEOHYDROLOGY - VENTURA RIVER REPORT
$0.00	P6029576	QUADRENNIAL REPORT (FY85-FY90)
$0.00	P6029576	QUADRENNIAL REPORT (FY91)
$0.00	P6029599	PHOTO COPYING
$0.00	P6029553	WATER WELL PUMP TEST FEES
$0.00	P6029599	OTHER MANUAL/REPORTS/ SALES

FOX CANYON GMA REVENUE 7305-GMA-6650-9772-P029

$0.00	P6020901	GMA PUMPING CHARGES
$0.00	P6020902	WELL DESTRUCTION FUND
$0.00	P6020903	GMA SURCHARGES
$0.00	P6020901	GMA WELL MAP
$0.00	P6020901	OTHER SALES
$0.00	5340-7176	CA. SALES TAX
$640.00		TOTAL RECEIPT

NOTES
Permit for destruction of 12 monitoring wells.

CASH: _____ **CHECK NO:** 43092 **RECEIVED BY:** Barbara Council

ID # 0

ATTACHMENT 3.

WATER WELL SEALING RECORDS

WATER WELL SEALING RECORD

PERMIT # 5844

START DATE. 9 /20/ 2004

EXPIRATION DATE 2 /17/2005

☐ NEW WELL ☒ DESTRUCTION ☐ OTHER _____

TYPE OF SEALING MATERIAL USED PORTLAND CEMENT AND BENTONITE GROUT MIX

WELL #	DELIVERED TO SITE Cu. Yd.	LEFT OVER Cu. Yd.	USED FOR SEALING Cu. Yd.	BOREHOLE Dia. (NEW WELLS)	WELL CASING Dia.	DEPTH OF SEAL FROM	DEPTH OF SEAL TO
MW-1	☐ _____ ☒ MIX ON SITE	NA	.5		2INCH	37	2
MW-3	☐ _____ ☒ MIX ON SITE	NA	.5		2INCH	38	2
MW-4	☐ _____ ☒ MIX ON SITE	NA	.5		2INCH	39	2

METHOD OF SEAL PLACEMENT: ☒ GROUT PIPE ☐ DROP ☐ OTHER _____

NUMBER OF GROUT PIPE SECTIONS 1 TO 4 LENGTH OF EACH SECTION 10 FT.

(DESTRUCTION ONLY)

CONFIRMATION THAT CASING WAS RIPPED OR PERFORATED AS REQUIRED BY PERMIT.

THE WELL WAS DRILLED OUT TO TOTAL DEPTH USING THE CASING AS A LEAD FOR THE HOLLOW STEM AUGER WHICH REMOVED THE CASING, SEAL, AND SAND PACK. PORTLAND CEMENT WITH BENTONITE WAS MIXED ONSITE AND TREMMIED DOWNHOLE TO 5FBG. HYDRATED BENTONITE CHIPS WERE DROPPED FROM 5 TO 2 FBG. THE SURFACE SEAL WAS SUITABLE TO MATCH THE SURFACE.

REMARKS: _____

DESCRIBE ANY VARIANCE IN SEALING METHOD OR MATERIAL FROM PERMIT CONDITIONS, OR ANY OTHER FACTOR WHICH, IN YOUR ESTIMATION, MIGHT HAVE CAUSED THE SEALING OPERATION TO BE LESS THAN SATISFACTORY. _____

NO VARIANCE IN SEALING METHOD

IN MY OPINION, THE WELL SEALING OPERATION WAS:

☒ SATISFACTORY.

☐ UNSATISFACTORY FOR REASONS DESCRIBED ABOVE.

OPTION:

☐ ATTACHED PHOTO OF SITE AND IMMEDIATE VICINITY.

☐ ATTACHED CEMENT TRUCK REPORT.

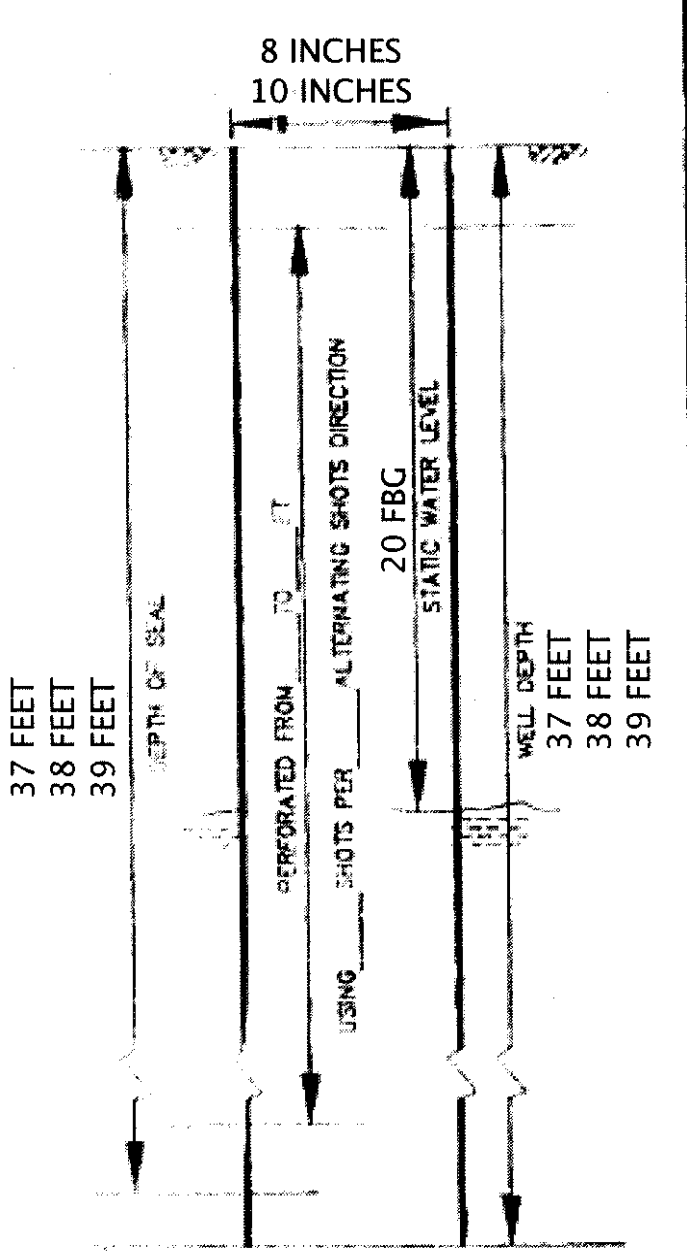
☐ OTHER. _____

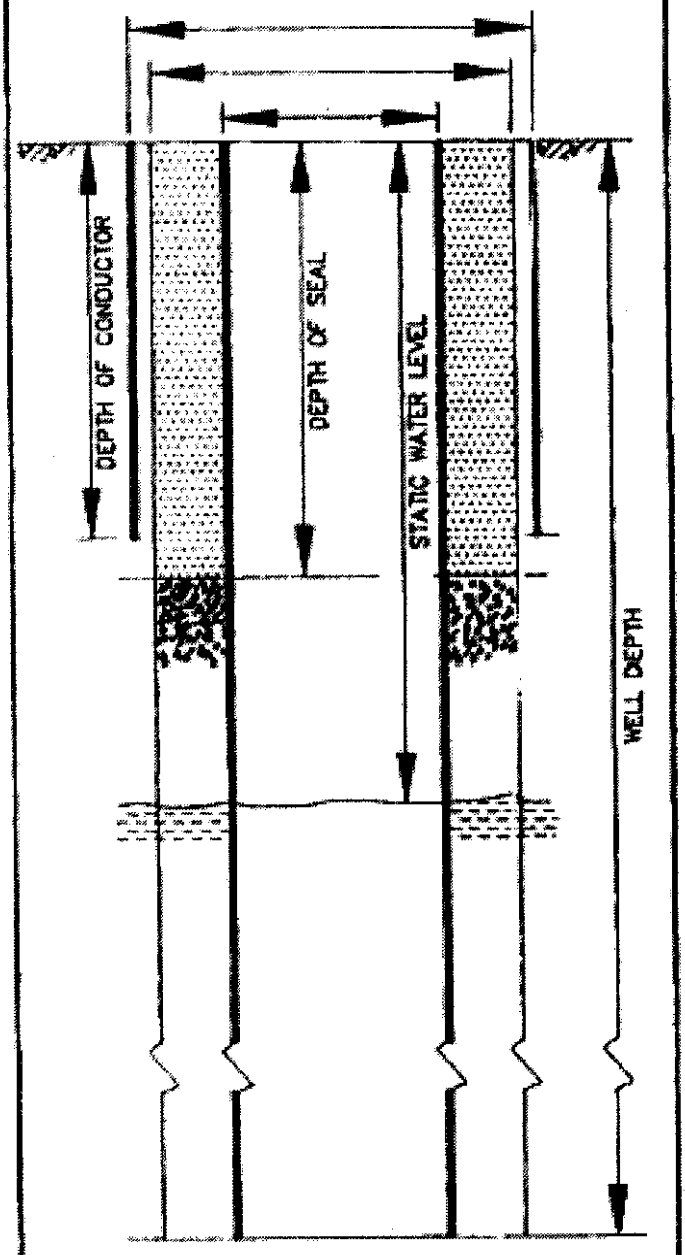
DATE SEALED 9 /20/2004

INSPECTOR _____ DATE 12/22/04

INSPECTION NOTES PERMIT # 5844

☒ DESTRUCTION ☐ NEW WELL





QUANTITIES OF		WATER	CEMENT	BENTONITE	SAND	GRAVEL	CLAY
☒ NEAT CEMENT (CEMENT SLURRY):	CEMENT + WATER	35GALS	400LBS	8LBS	—	— —	—
☐ CEMENT GROUT:	CEMENT + WATER + SAND					— —	—
☐ CONCRETE:	CEMENT + WATER + SAND + GRAVEL						—
☐ CLAY PELLETS:	SOMETIMES USED AS A SEAL BETWEEN GRAVEL SURROUNDING PERFORATIONS AND CONCRETE SEAL IN SHALLOW (MONITORING) WELLS						

WATER WELL SEALING RECORD

PERMIT # 5844

START DATE. 9 /20/ 2004

EXPIRATION DATE 2 /17/2005

☐ NEW WELL ☒ DESTRUCTION ☐ OTHER _____

TYPE OF SEALING MATERIAL USED PORTLAND CEMENT AND BENTONITE GROUT MIX

WELL #	DELIVERED TO SITE Cu. Yd.	LEFT OVER Cu. Yd.	USED FOR SEALING Cu. Yd.	BOREHOLE Dia. (NEW WELLS)	WELL CASING Dia.	DEPTH OF SEAL FROM	DEPTH OF SEAL TO
MW-5	☐ _____ ☒ MIX ON SITE	NA	1		4INCH	50	2
WELL-2	☐ _____ ☒ MIX ON SITE	NA	.5		2INCH	35	2
WELL-5	☐ _____ ☒ MIX ON SITE	NA	.2		2INCH	20	2

METHOD OF SEAL PLACEMENT: ☒ GROUT PIPE ☐ DROP ☐ OTHER _____

NUMBER OF GROUT PIPE SECTIONS 1 TO 4 LENGTH OF EACH SECTION 10 FT.

(DESTRUCTION ONLY)

CONFIRMATION THAT CASING WAS RIPPED OR PERFORATED AS REQUIRED BY PERMIT.

THE WELL WAS DRILLED OUT TO TOTAL DEPTH USING THE CASING AS A LEAD FOR THE HOLLOW STEM AUGER WHICH REMOVED THE CASING, SEAL, AND SAND PACK. PORTLAND CEMENT WITH BENTONITE WAS MIXED ONSITE AND TREMMIED DOWNHOLE TO 5FBG. HYDRATED BENTONITE CHIPS WERE DROPPED FROM 5 TO 2 FBG. THE SURFACE SEAL WAS SUITABLE TO MATCH THE SURFACE.

REMARKS: _____

DESCRIBE ANY VARIANCE IN SEALING METHOD OR MATERIAL FROM PERMIT CONDITIONS, OR ANY OTHER FACTOR WHICH, IN YOUR ESTIMATION, MIGHT HAVE CAUSED THE SEALING OPERATION TO BE LESS THAN SATISFACTORY. _____

NO VARIANCE IN SEALING METHOD

IN MY OPINION, THE WELL SEALING OPERATION WAS:

☒ SATISFACTORY.

☐ UNSATISFACTORY FOR REASONS DESCRIBED ABOVE.

OPTION:

☐ ATTACHED PHOTO OF SITE AND IMMEDIATE VICINITY.

☐ ATTACHED CEMENT TRUCK REPORT.

☐ OTHER. _____

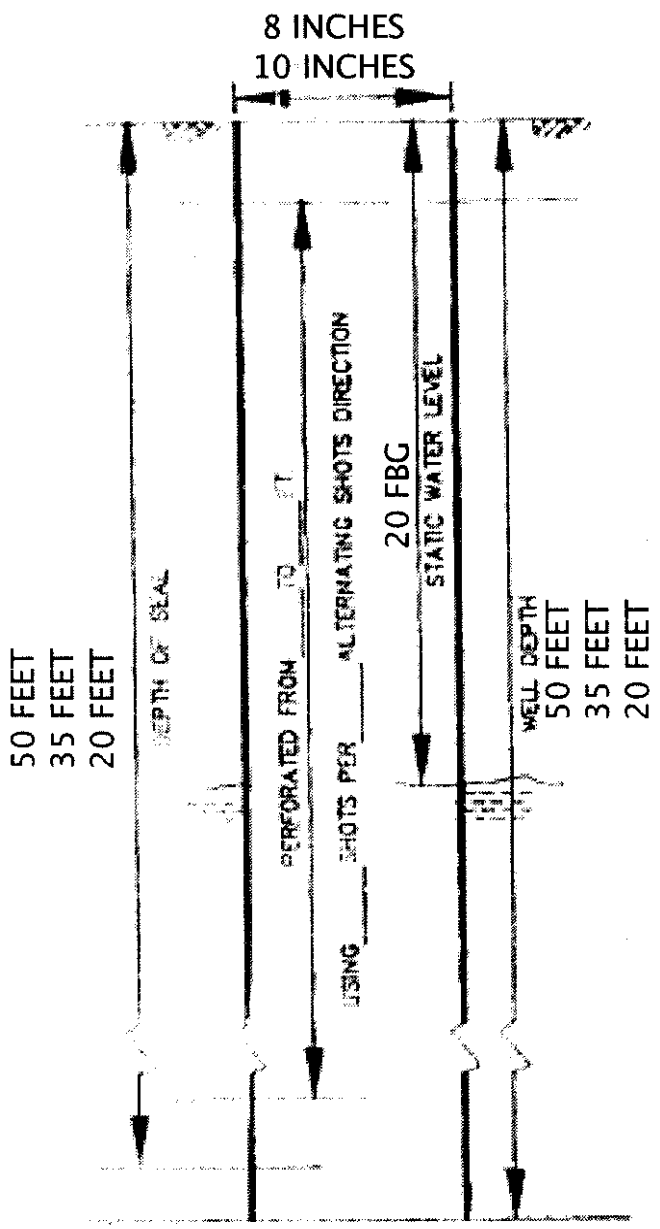
DATE SEALED 9 /20/2004

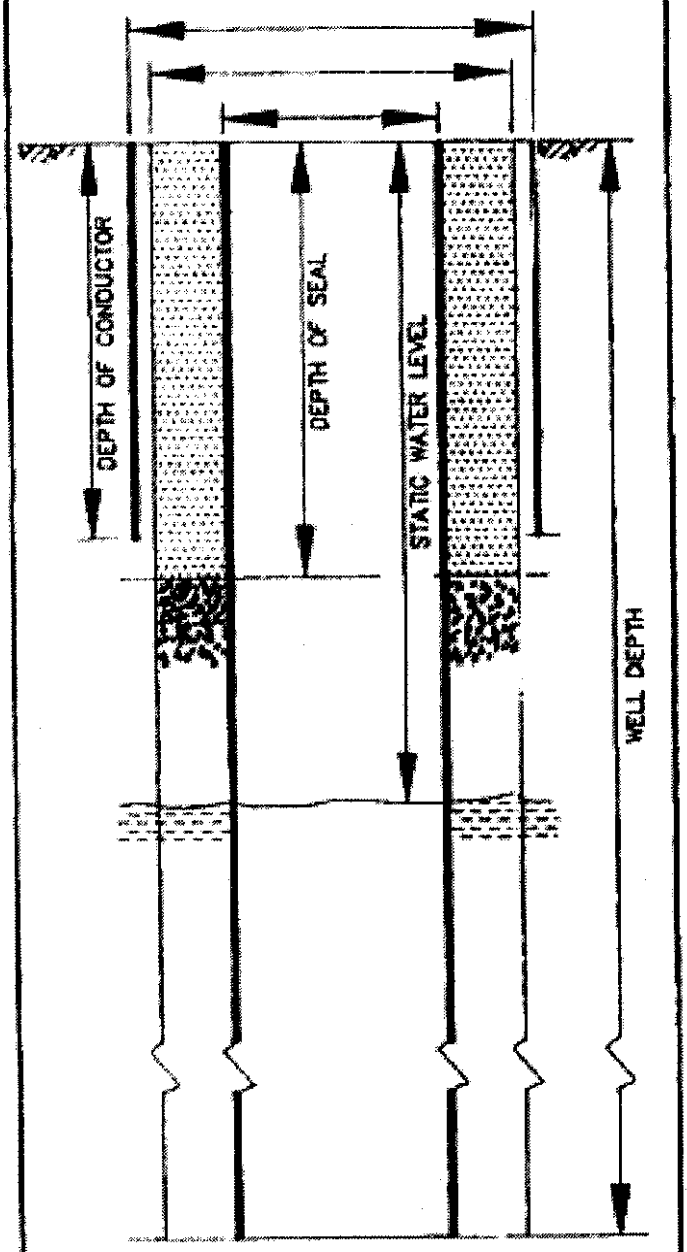
INSPECTOR 12/29/04 DATE

INSPECTION NOTES PERMIT # 5844

☒ DESTRUCTION

☐ NEW WELL





QUANTITIES OF		WATER	CEMENT	BENTONITE	SAND	GRAVEL	CLAY
☒ NEAT CEMENT (CEMENT SLURRY):	CEMENT + WATER	35GALS	400LBS	8LBS	—	—	—
☐ CEMENT GROUT:	CEMENT + WATER + SAND					—	—
☐ CONCRETE:	CEMENT + WATER + SAND + GRAVEL						—
☐ CLAY PELLETS:	SOMETIMES USED AS A SEAL BETWEEN GRAVEL SURROUNDING PERFORATIONS AND CONCRETE SEAL IN SHALLOW (MONITORING) WELLS						

WATER WELL SEALING RECORD

PERMIT # 5844

START DATE. 9/20/2004

EXPIRATION DATE 2/17/2005

☐ NEW WELL ☒ DESTRUCTION ☐ OTHER _____

TYPE OF SEALING MATERIAL USED PORTLAND CEMENT AND BENTONITE GROUT MIX

WELL #	DELIVERED TO SITE Cu. Yd.	LEFT OVER Cu. Yd.	USED FOR SEALING Cu. Yd.	BOREHOLE Dia. (NEW WELLS)	WELL CASING Dia.	DEPTH OF SEAL FROM	DEPTH OF SEAL TO
VEW-5	☐ _____ ☒ MIX ON SITE	NA	.5		2INCH	35	2
VEW-6	☐ _____ ☒ MIX ON SITE	NA	.5		2INCH	35	2
VEW-7	☐ _____ ☒ MIX ON SITE	NA	.5		2INCH	36	2

METHOD OF SEAL PLACEMENT: ☒ GROUT PIPE ☐ DROP ☐ OTHER _____

NUMBER OF GROUT PIPE SECTIONS 1 TO 4 LENGTH OF EACH SECTION 10 FT.

(DESTRUCTION ONLY)

CONFIRMATION THAT CASING WAS RIPPED OR PERFORATED AS REQUIRED BY PERMIT.

THE WELL WAS DRILLED OUT TO TOTAL DEPTH USING THE CASING AS A LEAD FOR THE HOLLOW STEM AUGER WHICH REMOVED THE CASING, SEAL, AND SAND PACK. PORTLAND CEMENT WITH BENTONITE WAS MIXED ONSITE AND TREMMIED DOWNHOLE TO 5FBG. HYDRATED BENTONITE CHIPS WERE DROPPED FROM 5 TO 2 FBG. THE SURFACE SEAL WAS SUITABLE TO MATCH THE SURFACE.

REMARKS: _____

DESCRIBE ANY VARIANCE IN SEALING METHOD OR MATERIAL FROM PERMIT CONDITIONS, OR ANY OTHER FACTOR WHICH, IN YOUR ESTIMATION, MIGHT HAVE CAUSED THE SEALING OPERATION TO BE LESS THAN SATISFACTORY. _____

NO VARIANCE IN SEALING METHOD

IN MY OPINION, THE WELL SEALING OPERATION WAS:

☒ SATISFACTORY.

☐ UNSATISFACTORY FOR REASONS DESCRIBED ABOVE.

OPTION:

☐ ATTACHED PHOTO OF SITE AND IMMEDIATE VICINITY.

☐ ATTACHED CEMENT TRUCK REPORT.

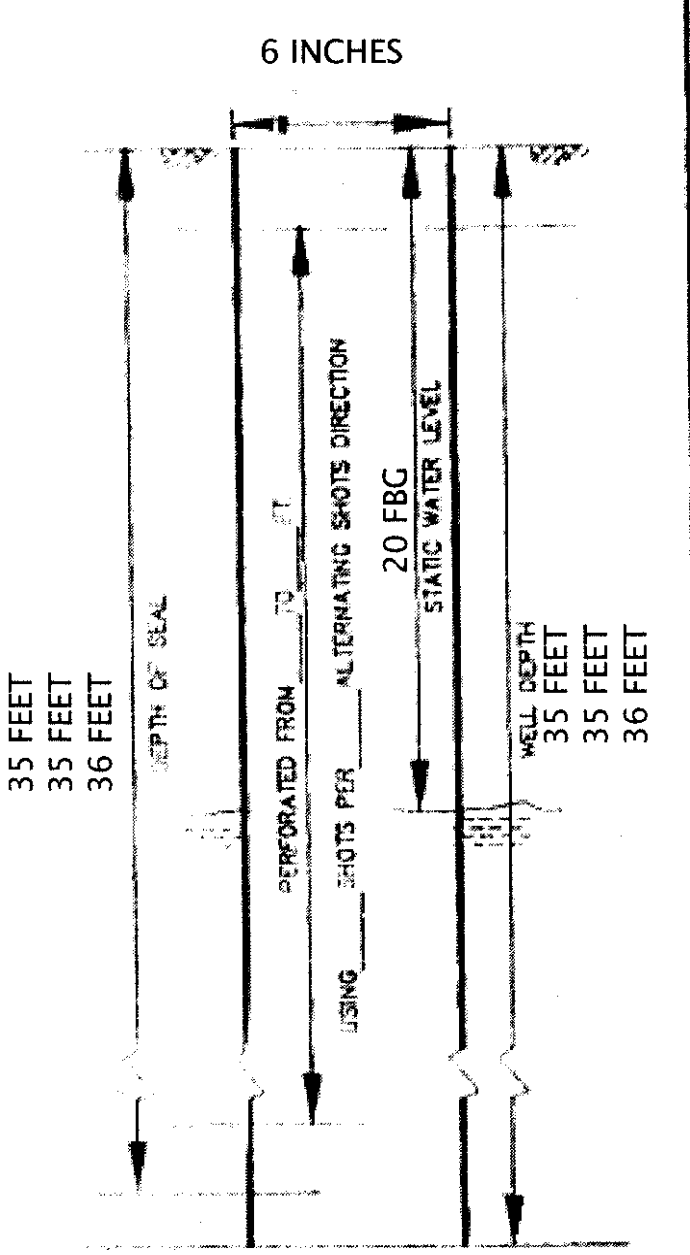
☐ OTHER. _____

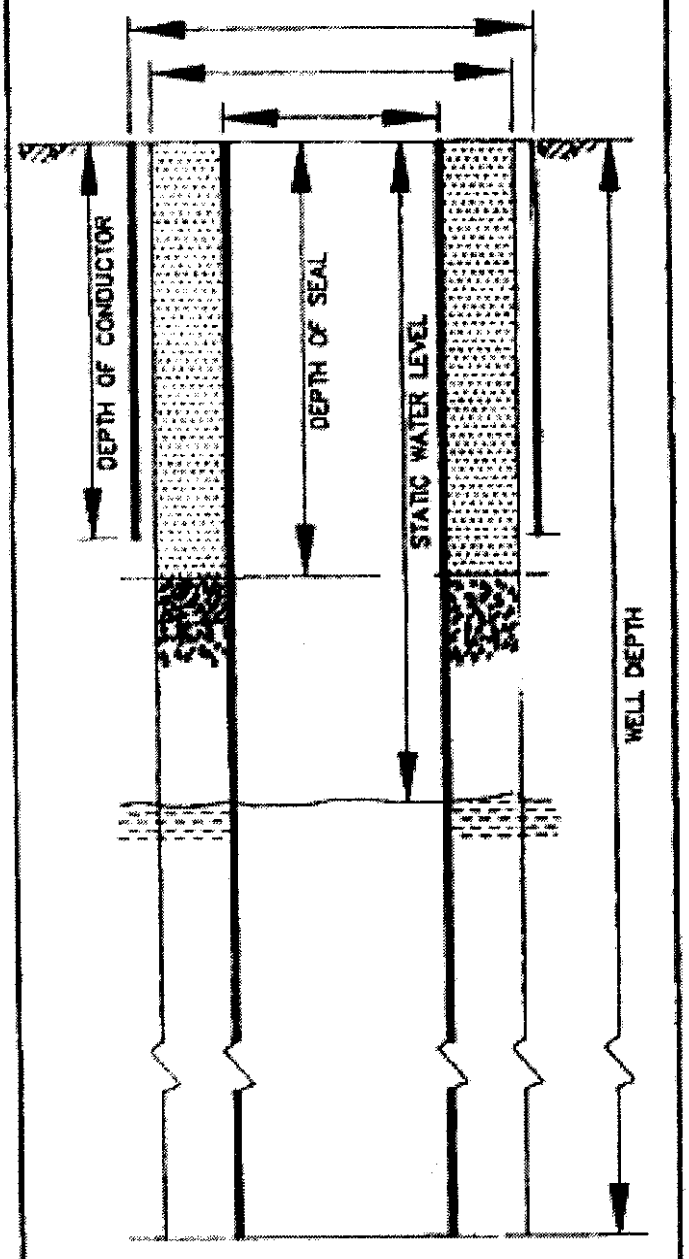
DATE SEALED 9/20/2004

INSPECTOR 12/29/04 DATE

INSPECTION NOTES PERMIT # 5844

☒ DESTRUCTION ☐ NEW WELL





QUANTITIES OF		WATER	CEMENT	BENTONITE	SAND	GRAVEL	CLAY
☒ NEAT CEMENT (CEMENT SLURRY):	CEMENT + WATER	35GALS	400LBS	8LBS	—	— —	—
☐ CEMENT GROUT:	CEMENT + WATER + SAND					— —	—
☐ CONCRETE:	CEMENT + WATER + SAND + GRAVEL						—
☐ CLAY PELLETS:	SOMETIMES USED AS A SEAL BETWEEN GRAVEL SURROUNDING PERFORATIONS AND CONCRETE SEAL IN SHALLOW (MONITORING) WELLS						

WATER WELL SEALING RECORD

PERMIT # 5844

START DATE. 9/20/2004

EXPIRATION DATE 2/17/2005

☐ NEW WELL ☒ DESTRUCTION ☐ OTHER

TYPE OF SEALING MATERIAL USED PORTLAND CEMENT AND BENTONITE GROUT MIX

WELL #	DELIVERED TO SITE Cu. Yd.	LEFT OVER Cu. Yd.	USED FOR SEALING Cu. Yd.	BOREHOLE Dia. (NEW WELLS)	WELL CASING Dia.	DEPTH OF SEAL FROM	DEPTH OF SEAL TO
VEW-8	☐ ____ ☒ MIX ON SITE	NA	.5		2INCH	35	2
	☐ ____ ☐ MIX ON SITE						
	☐ ____ ☐ MIX ON SITE						

METHOD OF SEAL PLACEMENT: ☒ GROUT PIPE ☐ DROP ☐ OTHER

NUMBER OF GROUT PIPE SECTIONS 1 TO 4 LENGTH OF EACH SECTION 10 FT.

(DESTRUCTION ONLY)

CONFIRMATION THAT CASING WAS RIPPED OR PERFORATED AS REQUIRED BY PERMIT.

THE WELL WAS DRILLED OUT TO TOTAL DEPTH USING THE CASING AS A LEAD FOR THE HOLLOW STEM AUGER WHICH REMOVED THE CASING, SEAL, AND SAND PACK. PORTLAND CEMENT WITH BENTONITE WAS MIXED ONSITE AND TREMMIED DOWNHOLE TO 5FBG. HYDRATED BENTONITE CHIPS WERE DROPPED FROM 5 TO 2 FBG. THE SURFACE SEAL WAS SUITABLE TO MATCH THE SURFACE.

REMARKS:

DESCRIBE ANY VARIANCE IN SEALING METHOD OR MATERIAL FROM PERMIT CONDITIONS, OR ANY OTHER FACTOR WHICH, IN YOUR ESTIMATION, MIGHT HAVE CAUSED THE SEALING OPERATION TO BE LESS THAN SATISFACTORY.

NO VARIANCE IN SEALING METHOD

IN MY OPINION, THE WELL SEALING OPERATION WAS:

☒ SATISFACTORY.

☐ UNSATISFACTORY FOR REASONS DESCRIBED ABOVE.

OPTION:

☐ ATTACHED PHOTO OF SITE AND IMMEDIATE VICINITY.

☐ ATTACHED CEMENT TRUCK REPORT.

☐ OTHER.

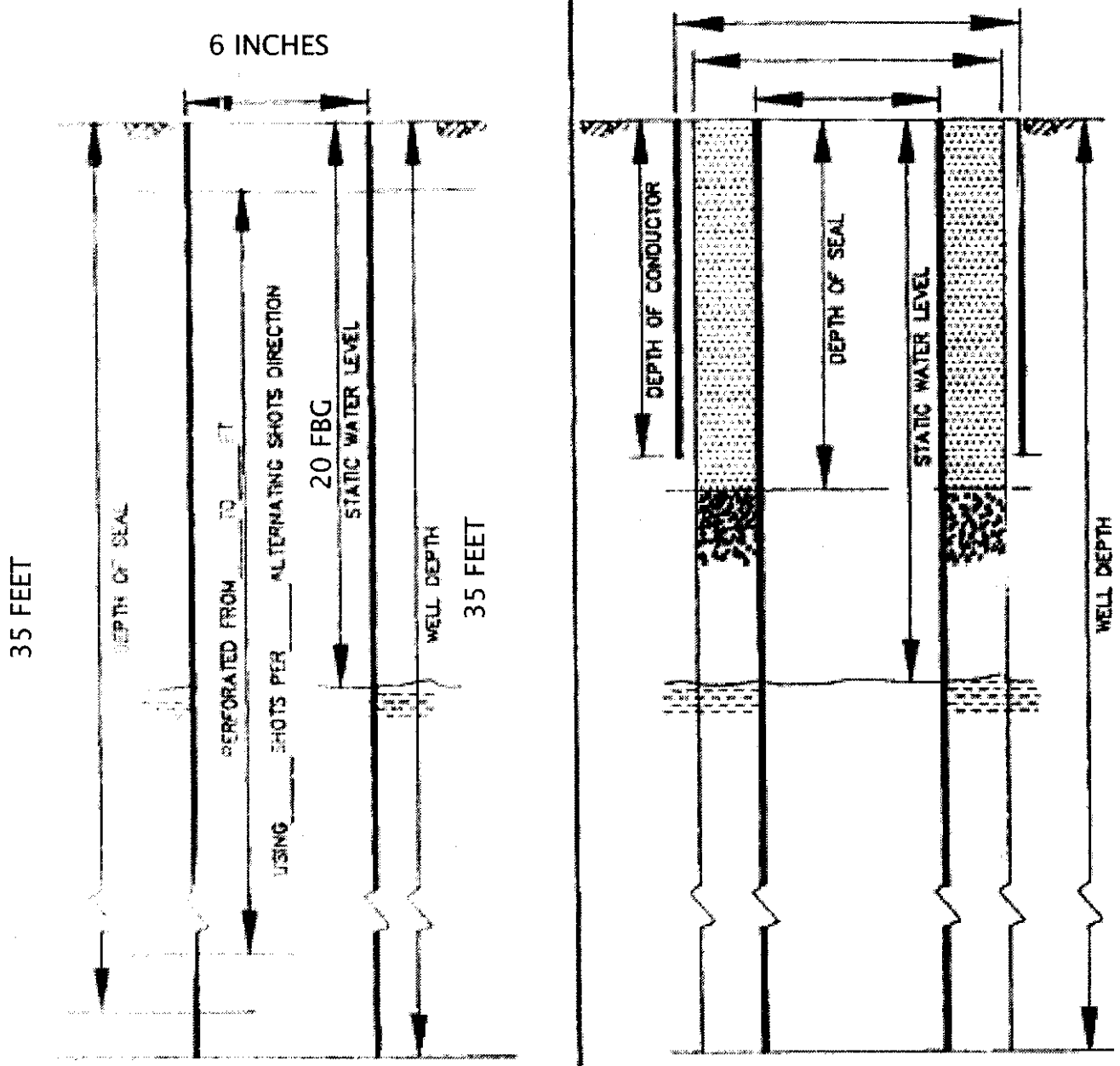
DATE SEALED 9/21/2004

INSPECTOR

12/28/04
DATE

INSPECTION NOTES PERMIT # 5844

☒ DESTRUCTION ☐ NEW WELL



QUANTITIES OF		WATER	CEMENT	BENTONITE	SAND	GRAVEL	CLAY
☒ NEAT CEMENT (CEMENT SLURRY):	CEMENT + WATER	35GALS	400LBS	8LBS	—	—	—
☐ CEMENT GROUT:	CEMENT + WATER + SAND					—	—
☐ CONCRETE:	CEMENT + WATER + SAND + GRAVEL						—
☐ CLAY PELLETS:	SOMETIMES USED AS A SEAL BETWEEN GRAVEL SURROUNDING PERFORATIONS AND CONCRETE SEAL IN SHALLOW (MONITORING) WELLS						

WATER WELL SEALING RECORD

PERMIT # 5844

START DATE. 9 /20 2004

EXPIRATION DATE 2 /17/2005

☐ NEW WELL ☒ DESTRUCTION ☐ OTHER

TYPE OF SEALING MATERIAL USED PORTLAND CEMENT AND BENTONITE GROUT MIX

WELL #	DELIVERED TO SITE Cu. Yd.	LEFT OVER Cu. Yd.	USED FOR SEALING Cu. Yd.	BOREHOLE Dia. (NEW WELLS)	WELL CASING Dia.	DEPTH OF SEAL FROM	TO
WELL-6	☐ ☒ MIX ON SITE	NA	.2		2INCH	20	2
WELL-7	☐ ☒ MIX ON SITE	NA	.2		2INCH	20	2
	☐ ☐ MIX ON SITE						

METHOD OF SEAL PLACEMENT: ☒ GROUT PIPE ☐ DROP ☐ OTHER

NUMBER OF GROUT PIPE SECTIONS 1 TO 4 LENGTH OF EACH SECTION 10 FT.

(DESTRUCTION ONLY)

CONFIRMATION THAT CASING WAS RIPPED OR PERFORATED AS REQUIRED BY PERMIT.

THE WELL WAS BACKFILLED WITH SEALING MATERIAL AND HELD UNDER PRESSURE UNTIL SANDPACK AND CASING WERE FILLED. THE TOP 5 FEET OF CASING WAS THEN REMOVED. HYDRATED BENTONITE CHIPS WERE DROPPED FROM 5 TO 2 FBG. THE SURFACE SEAL WAS CONCRETE TO MATCH THE SURROUNDING.

REMARKS:

DESCRIBE ANY VARIANCE IN SEALING METHOD OR MATERIAL FROM PERMIT CONDITIONS, OR ANY OTHER FACTOR WHICH, IN YOUR ESTIMATION, MIGHT HAVE CAUSED THE SEALING OPERATION TO BE LESS THAN SATISFACTORY.

THE VARIANCE IN SEALING METHOD WAS APPROVED BY VCPWA PRIOR TO PRESSURE GROUTING THE ANGLED WELLS.

IN MY OPINION, THE WELL SEALING OPERATION WAS:

☒ SATISFACTORY.

☐ UNSATISFACTORY FOR REASONS DESCRIBED ABOVE.

OPTION:

☐ ATTACHED PHOTO OF SITE AND IMMEDIATE VICINITY.

☐ ATTACHED CEMENT TRUCK REPORT.

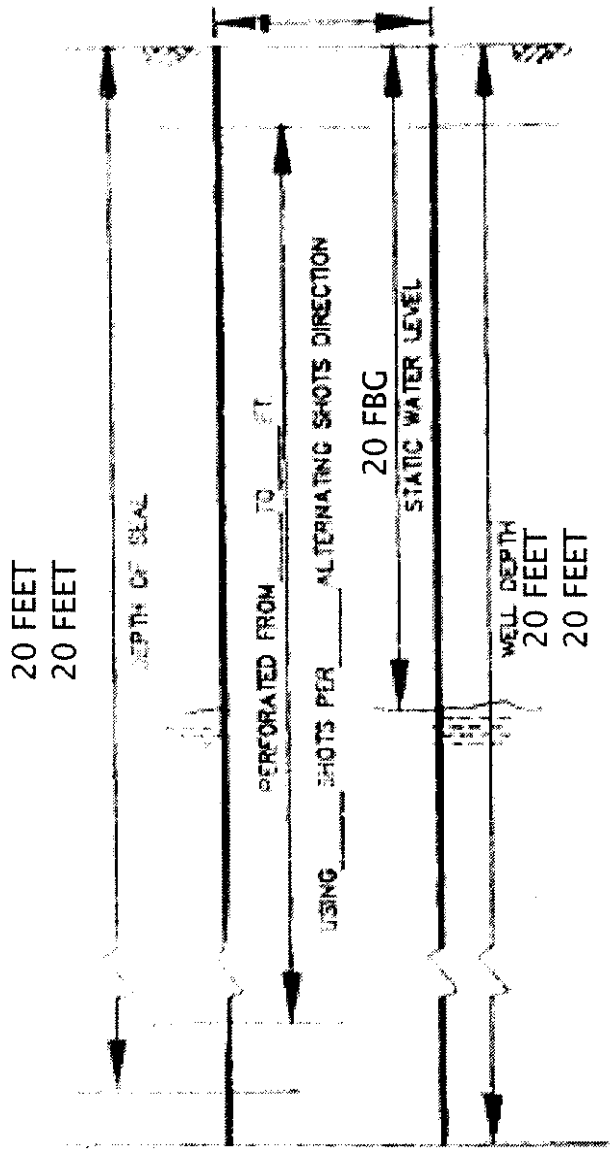
☐ OTHER.

DATE SEALED 10 / 5/ 2004

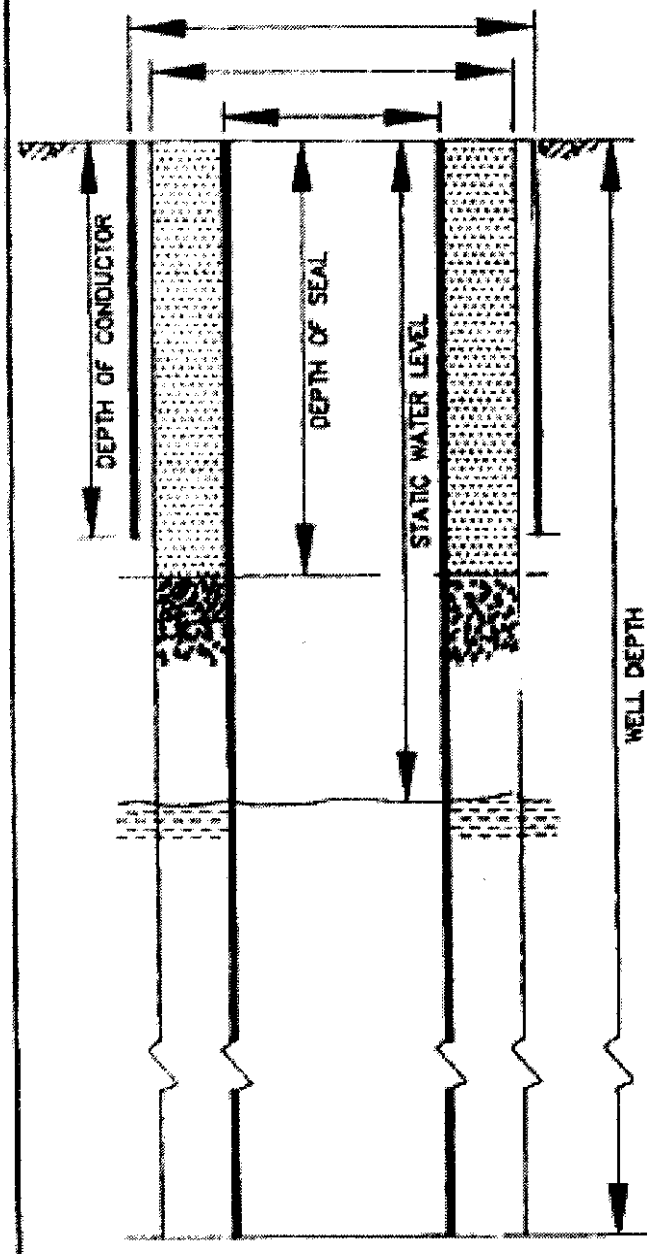
[signature] INSPECTOR 12/29/04 DATE

INSPECTION NOTES PERMIT # 5844

☒ DESTRUCTION



☐ NEW WELL



QUANTITIES OF		WATER	CEMENT	BENTONITE	SAND	GRAVEL	CLAY
☒ NEAT CEMENT (CEMENT SLURRY):	CEMENT + WATER	35GALS	400LBS	8LBS	—	— —	—
☐ CEMENT GROUT:	CEMENT + WATER + SAND					— —	—
☐ CONCRETE:	CEMENT + WATER + SAND + GRAVEL						—
☐ CLAY PELLETS:	SOMETIMES USED AS A SEAL BETWEEN GRAVEL SURROUNDING PERFORATIONS AND CONCRETE SEAL IN SHALLOW (MONITORING) WELLS						

ATTACHMENT 4.

WASTE MANIFESTS

PSC PHILIP SERVICES CORP.

No. 032065

NON-HAZARDOUS WASTE DATA FORM

DS 7739

TO BE COMPLETED BY GENERATOR

NAME: Chevron Products Company — CHEVRON S/S # 9-8749 — LINE # 35

ADDRESS: P.O. BOX 6004 — 522 NORTH LAS POSAS ROAD — EPA NO.: N / A

CITY, STATE, ZIP: SAN RAMON, CA 94583 — CAMARILLO, CA — PHONE NO.: 805 585-6372

ATTN: KATHY NORRIS L2173

CONTAINERS: No. 1 — VOLUME 55 G — WEIGHT

TYPE: ☐ TANK TRUCK ☐ DUMP TRUCKS ☐ DRUMS ☐ CARTONS ☐ OTHER

WASTE DESCRIPTION: GROUNDWATER — GENERATING PROCESS

COMPONENTS OF WASTE	PPM	%
1. WATER		99-100%
2. T.P.H.		0-1%
3.		
4.		
5.		
6.		
7.		
8.		

PROPERTIES: pH ____ ☐ SOLID ☐ LIQUID ☐ SLUDGE ☒ SLURRY ☐ OTHER

Wear proper personal protective gear when handling material.

HANDLING PROCEDURES/CRITERIA: TASNIF ABBSI / CHEVRON

THIS GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS

AS AGENT FOR CHEVRON

LOU BAILEY — 10-25-04

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

TRANSPORTER

NAME: PHILIP WEST INDUSTRIAL SERVICES, INC. — EPA I.D. NO.: CAR000146837

ADDRESS: 1661 E. 32ND STREET — JOB NO.

CITY, STATE, ZIP: LONG BEACH, CA 90806 — PICK UP DATE

PHONE NO.: 562 997-6000

TRUCK, UNIT, I.D. NO.

Charles Fletcher — 10-26-04

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

TSD FACILITY

NAME: U.S. FILTER RECOVERY SERVICES — EPA I.D. NO.: CAD097030993

ADDRESS: 5375 S. BOYLE AVE. — DISPOSAL METHOD

CITY, STATE, ZIP: LOS ANGELES, CA. 90058 — ☐ LANDFILL ☐ OTHER — Profile # P140444

PHONE NO.: 323 277-1450

11-8-04

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

GEN	OLD/NEW	L A	TONS	
TRANS		S B		
C/Q		RT/CD	HW/DF NONE	DISCREPANCY

TRANSPORTER 1

323-7-88 (8/00)

TPS Technologies Soil Recycling

Non-Hazardous Soils

Date of Shipment:	Responsible for Payment:	Transporter Truck #:	Facility #:	Given by TPS:	Load #
		704-970		23704	

Generator and/or Consultant

Generator's Name and Billing Address:	Generator's Phone #:	Generator's US EPA ID No.:
CHEVRON PRODUCTS CO. SAN RAMON, CA. 94583-0804 ATTN: KATHY NORRIS	Person to Contact: FAX#: TASNIF-ABBASI	Customer Account Number with TPS:
Consultant's Name and Billing Address:	**Consultant's Phone #:**	
HOLGUIN FAHAN & ASSOC 16540 ASTON ST. IRVINE, CA 92606	Person 805-585-6372 FAX#: ELVA ROGERS	Customer Account Number with TPS:
Generation Site (Transport from): *(name & address)*	**Site Phone #:**	BTEX Levels
CHEVRON S/S # 9-8749 522 NORTH LAS POSAS ROAD CAMARILLO, CA 1WR# 1348872 Line # 35	Person to Contact: FAX#:	TPH Levels AVG. Levels
Designated Facility (Transport to): *(name & address)*	**Facility Phone #:** (800) 862-8001	Facility Permit Numbers
TPS TECHNOLOGIES 12328 HIBISCUS AVENUE ADELANTO, CA. 92301	Person to Contact: JOE PROVANSAL FAX#:	
Transporter Name and Mailing Address:	**Transporter's Phone #:** (562)997-6000	Transporter's US EPA ID No.:
PHILIP WEST INDUSTRIAL SERVICES, INC. 1661 E. 32ND ST. LONGBEACH, CA. 90807-5233	Person to Contact: FAX#: LOU BAILEY (562)997-6059	Transporter's DOT No.: Customer Account Number with TPS:

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐	24 cy		30860	18820	14040
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐					7.02

List any exception to items listed above: 13292

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name:	Agent ☐ Consultant ☐	Signature and date:	Month	Day	Year
LOU BAILEY	As Agent for Chevron	Lou Bailey	10	25	05

Transporter

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name:	Signature and date:	Month	Day	Year
CHARLES FLETCHER		10	26	05

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name:	Signature and date:
JOE PROVANSAL / DELLENA BENTON	11-11-4